

**AMENDMENT AND RESPONSE TO OFFICE ACTION**

**Amendment**

**In the Claims**

1. (previously presented) A vaccine composition for inducing an immune response to a pathogen comprising a nucleic acid encoding an antigen eliciting an immune response to the pathogen encapsulated in a mucoadhesive controlled release particulate formulation comprising an open-celled polymeric foam of approximately 95% void volume, or particles thereof.

2. (canceled)

3. (previously presented) The composition of claim 1 further comprising a mucoadhesive polymer coating.

4. (original) The composition of claim 1 further comprising an enteric outer coating or capsule.

5. (original) The composition of claim 1 having a particulate diameter of less than five microns.

6. (previously presented) The composition of claim 1 formed by lyophilizing a solution of a biodegradable polymer to form an open-celled polymeric foam of approximately 95% void volume,

impregnating the foam with an aqueous solution of the nucleic acid,

lyophilizing the foam to remove the water, and

extruding the resulting matrix at ultrahigh pressures.

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7. (previously presented) The composition of claim 1 wherein the method further comprises cryogenically grinding the matrix to an average particle size of fifteen microns in diameter; and sieving to isolate particles less than five microns in diameter.

8. (original) The composition of claim 1 wherein the polymer is a low molecular weight poly(D,L-lactide-co-glycolide).

9. (currently amended) The composition of claim 1 wherein the pathogen is selected from the group consisting of *malaria* *Plasmodium falciparum*, *tularemia* *Francisella tularensis*, *anthrax* *Bacillus anthracis*, and *Helicobacter pylori*.

10. (original) The composition of claim 1 further comprising providing an adjuvant with the antigen.

11. (original) The composition of claim 1 wherein the antigen is expressed or released for a period of weeks to months.

12-21. (canceled)